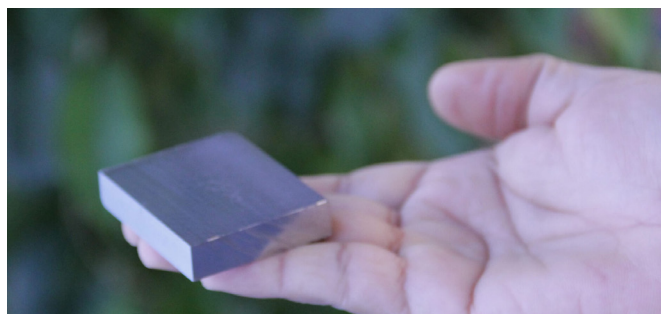


Making wood – aligning nanocellulose fibres for composite materials



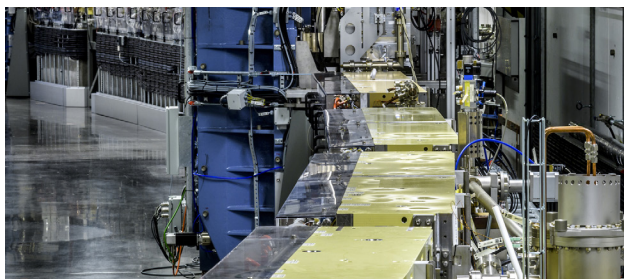
Freeze drying suspensions of nanocellulose in water under the right conditions result in well-ordered networks of aligned fibres. A recent study shows an ice-templating method as a promising way for sustainable composites and new human-made wood materials. [Read the full story](#)

MAXPEEM monitors inclusions to control high strength steel properties



Researchers studied non-metallic inclusions in the matrix of ultra-high-strength steel to learn how additions can significantly effect its properties, and what interactions occur in different compositions. Results could lead to better control of steel properties in engineering materials. [Read the full story](#)

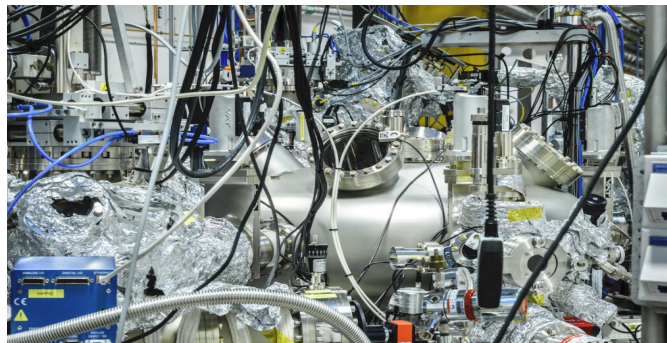
First kicker system for transparent injection installed on a 4th-gen ring



A transparent injection scheme using a multipole injection kicker was successfully brought into routine operation in the MAX IV 3 GeV ring. To counter a slow decrease in stored current over time, new electrons must be injected regularly with top-up injections while keeping disturbances to the light beam delivery as low as possible. [Read the full story](#)

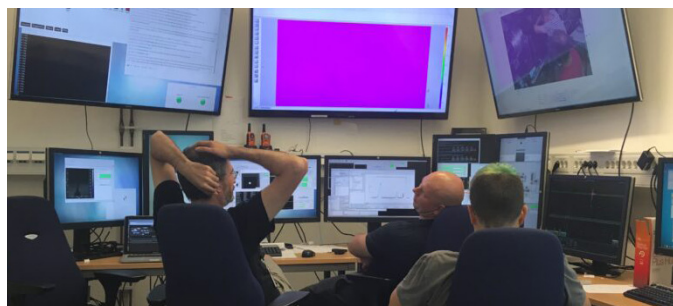


Forging stable catalysts for the future



Research from Friedrich-Alexander University Erlangen-Nürnberg in Germany with MAX IV's HIPPIE beamline outlines a unique single atom catalyst model system based on SCALMS. In reference, noble metal catalysts are critical ingredients in reactions for large-scale chemical synthesis, 'green' energy generation and air purification. [Read the full story](#)

A future setup for catching ultrafast protein movement at FemtoMAX



A new study found the ultrashort X-ray pulses of FemtoMAX can create high-res images of stationary protein crystals. This is an essential step for catching proteins movement for predictions of how mutated viruses infect cells. [Read the full story](#)

SCIENTÍFika seminar series

Welcome back for the return of the MAX IV [SCIENTÍFika series](#) of scientific talks. Our autumn 2021 programme of guest speakers and topics are found on the MAX IV website. Register today!

